

DETAILED ACTION

Summary

1. Claims 1-29 are pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being anticipated by MAPICS software in view of Wong US 6,115,690.

MAPICS software is described in the following documents:

Web.archive.org's MAPICS.com webpage of February 29, 2000, "technology AS/400e", hereafter referred to as Reference A.

Web.archive.org's MAPICS.com webpage of November 9, 1999, "Future Directions", hereafter referred to as Reference B.

Web.archive.org's MAPICS.com webpage of November 5, 1999, "Products Overview", hereafter referred to as Reference C.

Web.archive.org's MAPICS.com webpage of November 4, 1999, "Products Demand", hereafter referred to as Reference D.

Web.archive.org's MAPICS.com webpage of November 5, 1999, "Resource Planning", hereafter referred to as Reference E.

Bruce Wassell's www-919.ibm.com webpage copyrighted March, 1999,
"MQSeries for AS/400 V5.1", hereafter referred to as Reference F.

Web.archive.org's MAPICS.com webpage of April 16, 2000, "MAPICS XA
Product Family", hereafter referred to as Reference G.

Regarding Claim 1, MAPICS teaches:

a plurality of high availability (HA) systems coupled to one or more external
systems using a message bus (Reference B page 1 paragraph 5 line 1-3, system
provides connectivity across multiple sites; Reference B page 1 paragraph 6 line 4-5,
MAPICS will run using JAVA on NT platform allowing networking across a plurality of
systems; Reference E page 2 paragraph 5 line 3-4, MISL handles more than one
inventory location using one or more AS/400's), each HA system including:

an HA server operable to receive and queue requests received from the
external systems (Reference B page 1 paragraph 3 line 1-2, High Availability AS/400
Server provides substantially continuous availability; Reference C page 2 paragraph 1
line 10, external users have internet access for inquiry); and

an advanced planning and scheduling (APS) engine (Reference E page 1
paragraph 1 line 2-3, MPSP application is an APS engine) operable to:

receive a request from the HA server (Reference E page 2 paragraph 6 line 1,
requesting warehouse requests items from supplying warehouse);

process the request using planning information stored in memory of the HA
system (Reference E page 2 paragraph 6 line 2, plans generated for items for
requesting warehouse);

modify the planning information, according to the processing of the request (Reference E page 2 paragraph 6 line 4-5, supplying warehouse plans for requirements in MPSP and/or MRP as appropriate), and

generate a response to the system from which the request originated (Reference E page 2 paragraph 7 line 5-7, shipping manifest created for tracking and demand and inventory updated to reflect order fulfillment to requesting warehouse); and

a message manager operable to direct each request received from a system to an appropriate HA system using the message bus (Reference E page 2 paragraph 5 line 3-4, MISL or Multi-Environment InterSite Logistics handles messaging between multiple warehouses on one or more server).

MAPICS teaches developing software to run using Java on the Windows™ NT platform (Reference B page 1 paragraph 6 line 4-5). MAPICS teaches using COM_Net to allow external users access customer information regarding status of orders, pricing and availability (Reference A page 1 paragraph 3 line 6-8).

MAPICS does not teach allowing external users to enter requests, from an external bus.

Wong teaches allowing users external to the enterprise to enter requests (column 6 line 30-35, external users may use web to track orders, track payments and order products). Wong teaches that the use of the web drastically streamlines business processes that are transactional in nature (column 4 line 18-21) and automates the various aspects of running a business (column 3 line 66 – column 4 line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention, to



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EXAMINER

STERRETT, JONATHAN G

ART UNIT	PAPER NUMBER
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DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,003

Applicant(s)

OJHA ET AL.

Examiner

Jonathan G. Sterrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/13/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

modify the teachings of MAPICS, as discussed above, with allowing users external to the enterprise to enter requests, as taught by Wong, because it would streamline business processes that are transactional in nature and automate to the greatest degree possible, the various aspects of running a successful and profitable business.

Regarding Claim 2, MAPICS teaches:

the HA systems are associated with a supplier of products (Reference C page 3 paragraph 7 line 1-2, systems used to ensure proper supply of materials, labor and machine requirements for product manufacturing; Reference E page 1 paragraph 3 line 4-6, MPSP used by suppliers to meeting customer demands and shipping products);

the message bus comprises the Internet (Reference A page 1 paragraph 3 line 6, internet accessibility for messaging; Reference D page 2 paragraph 7 line 2, customer service transactions, including request messaging, occur over internet);

the planning information comprises available-to-promise (ATP) supply information associated with one or more products (Reference E page 1 paragraph 1 line 2-4, ATP provided for individual or families of products); and

the APS engine comprises a demand fulfillment engine operable to promise ATP supply to a customer in response to the product orders (Reference E page 1 paragraph 1 line 4, production plans provided to customer order management for ATP calculations).

MAPICS teaches developing software to run using Java on the Windows™ NT platform (Reference B page 1 paragraph 6 line 4-5). MAPICS teaches using

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COM_Net to allow external users access customer information regarding status of orders, pricing and availability (Reference A page 1 paragraph 3 line 6-8).

MAPICS does not teach:

the external systems comprise external ordering systems associated with customers;

the requests comprise product orders from customers;

Wong teaches:

the external systems comprise external ordering systems associated with customers (column 14 line 49-52, external customer uses external ordering system);

the requests comprise product orders from customers (column 14 line 49-52, product order submitted by customer).

Wong teaches allowing users external to the enterprise to enter requests (column 6 line 30-35, external users may use web to track orders, track payments and order products). Wong teaches that the use of the web drastically streamlines business processes that are transactional in nature (column 4 line 18-21) and automates the various aspects of running a business (column 3 line 66 – column 4 line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the teachings of MAPICS, as discussed above, with the external systems comprise external ordering systems associated with customers and the requests comprise product orders from customers, as taught by Wong, because it would streamline business processes that are transactional in nature and automate to the

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greatest degree possible, the various aspects of running a successful and profitable business.

Regarding Claim 3, MAPICS teaches wherein the HA server in each HA system is further operable to communicate modifications to the planning information made by the associated APS engine to the other HA systems (Reference E page 1 paragraph 5 (MISL – Multi-Environment Site Logistics, handles warehouses in multiple MAPICS environments on one or more AS/400's).

Regarding Claim 4, MAPICS teaches

a primary HA system operable to process requests requiring modification of the planning information (Reference E page 2 paragraph 5 line 3-4, MISL allows more than one AS/400 to run MAPICS and to process requests between the AS/400's; Reference E page 2 paragraph 6 line 2, plans generated for items for requesting warehouse); and

one or more secondary HA systems operable to process requests not requiring modification of the planning information (Reference D page 2 paragraph 7 line 3-4, COM_Net supports commonly requested customer service functions such as pricing, product, and order status inquiry); and

the message manager is operable to (Reference F page 6 paragraph 2 line 3-4, a workload management algorithm determines which queue manager handles the message):

MAPICS teaches using a queue manager to direct requests utilizing resources assigned to that queue manager (Reference F page 4 paragraph 6 line 1-3, each queue

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manager manages its own MQSeries resources including, queues channels, and listeners).

MAPICS does not teach:

direct requests received from external systems and requiring modification of the planning information to the primary HA system; and

direct requests received from external systems and not requiring modification of the planning information to one of the secondary HA systems.

The examiner takes Official Notice that it is old and well known in the art of queuing theory to direct different kinds of requests, including those requiring modification of planning information and those not requiring modification of planning information, to various systems in order to balance workload information and in accordance with the priority of the particular request. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the collective teachings of MAPICS and Wong, as discussed above, with directing requests requiring modification of planning information to a primary HA system and directing requests not requiring planning to one the secondary HA systems, because it would balance server workload and provide priority to those requests requiring modification of planning information.

Regarding Claim 5, MAPICS teaches:

the primary HA system is further operable to communicate information to the secondary HA systems relating to modifications made to the planning information by

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the APS engine of the primary HA system (Reference E page 1 paragraph 5 line 3-5, MISL handles warehouses in multiple warehouse environments on one or more AS/400's); and

each secondary HA system is operable to modify the planning information stored in memory associated with the secondary HA system according to the information received from the primary HA system (Reference E page 1 paragraph 7 line 9-10, demand and item availability are updated accordingly in secondary and primary HA systems when items is transferred).

Regarding Claim 6, MAPICS does not teach wherein at least one of the secondary HA systems is operable to become the primary HA system in the event the primary HA system becomes unavailable. The examiner takes Official Notice that it is old and well known in the art of business continuity and business and disaster recovery planning to have at least one backup secondary system in case a primary system fails. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the collective teachings of MAPICS and Wong, as discussed above, with wherein at least one of the secondary HA systems is operable to become the primary HA system in the event the primary HA system becomes unavailable, because it would provide continuity and disaster recovery necessary for a high availability environment.

Regarding Claim 7, MAPICS teaches wherein the message manager is further operable to direct each request not requiring modification of the planning information to a particular one of a plurality of secondary HA systems based at least on the

number of requests that are queued in the particular secondary HA system (Reference F page 6 paragraph 2 line 3-4, a workload management algorithm determines which queue manager handles the message).

Regarding Claim 8, MAPICS teaches wherein the requests not requiring modification of the planning information comprise product inquiries (Reference A page 1 paragraph 3 line 6-8, COM_Net allows external users access to customer information regarding status of orders, pricing and availability).

MAPICS does not teach wherein the requests requiring modification of the planning information comprise product orders.

Wong teaches wherein the requests requiring modification of the planning information comprise product orders column 14 line 49-52, product order submitted by customer). Wong teaches allowing users external to the enterprise to enter requests (column 6 line 30-35, external users may use web to track orders, track payments and order products). Wong teaches that the use of the web drastically streamlines business processes that are transactional in nature (column 4 line 18-21) and automates the various aspects of running a business (column 3 line 66 – column 4 line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the teachings of MAPICS, as discussed above, with wherein the requests requiring modification of the planning information comprise product orders, as taught by Wong, because it would streamline business processes that are transactional in nature and automate to the greatest degree possible, the various aspects of running a successful and profitable business.

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Regarding Claim 9, MAPICS teaches wherein each HA system further comprises a transform library operable to:

receive the response from the APS engine and modify the response to a format appropriate for the external system for which the response was generated; and

receive a request from an external system and modify the request to a format appropriate for the APS engine included in the HA system.

MAPICS teaches using EDI, which contains means to transform and modify requests and responses internal and external to the system as required (Reference G page 1 paragraph 2 line 1-6). It is also old and well known in the art that XML provides transform libraries (XSLT) which provide style sheet translation so that data formatting can be transformed from one source to another.

Claim 10 recites limitations addressed by the rejection of Claim 4 above, therefore the same rejection applies.

3. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being anticipated by MAPICS software in view of Wong US 6,115,690 and further in view of DataMirror's software product.

DataMirror software is described in the following documents:

BusinessWire, May 25, 1999, "DataMirror High Availability Suite wins in IBM Powered by AS/400E Program", hereafter referred to as Reference A.

Web.archive.org's DataMirror.com webpage of February 10, 1999, "High Availability Suite", hereafter referred to as Reference B.

Web.archive.org's DataMirror.com webpage of December 6, 1998, "DataMirror Products", hereafter referred to as Reference C.

Claim 11 recites limitations addressed by the rejection of Claim 1 above, except for:

generate a replication message including information reflecting the modifications made to the planning information by the primary HA system; the HA server further operable to communicate the replication message to one or more secondary HA systems that are coupled to the primary HA system and to the external systems, each secondary HA system operable to modify a local copy of the planning information stored in memory of the secondary HA system according to the replication message.

DataMirror teaches generate a replication message including information reflecting the modifications made to the planning information by the primary HA system; the HA server further operable to communicate the replication message to one or more secondary HA systems that are coupled to the primary HA system and to the external systems (Reference B page 2 paragraph 1 line 1-3, database transactions capture from production systems and replicates to one or more backup servers), each secondary HA system operable to modify a local copy of the planning information stored in memory of the secondary HA system according to the replication message (Reference B page 2 paragraph 3 line 7-8, backup systems can assume operation of primary system).

DataMirror teaches that it's software ensure that data is distributed, available, effectively managed and accessible anywhere in the world in real time (Reference A

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page 1 paragraph 7 line 3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the collective teachings of MAPICS and Wong, as discussed above, with generating a replication message including information reflecting the modifications made to the planning information by the primary HA system; the HA server further operable to communicate the replication message to one or more secondary HA systems that are coupled to the primary HA system and to the external systems, each secondary HA system operable to modify a local copy of the planning information stored in memory of the secondary HA system according to the replication message, as taught by DataMirror, because this would ensure that planning data is distributed, available, effectively managed and accessible anywhere in the world in real time.

Regarding Claim 12, MAPICS doesn't teach a transform library operable to:

receive the response from the APS engine and modify the response to a format appropriate for the external system for which the response was generated; and

receive a request from the external system and modify the request to a format appropriate for the APS engine. The examiner takes Official Notice that it is old and well known in the art to use XML style sheets to receive and modify responses to a format appropriate for internal and external systems. XML contains XSLT templates which provides a transform library function to make data formatting independent of the source. There are style sheet templates available on the WWW that can be downloaded. It would have been obvious to one of ordinary skill in the art at the time of the invention

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to modify the collective teachings of MAPICS and Wong, as discussed above with a transform library operable to:

receive the response from the APS engine and modify the response to a format appropriate for the external system for which the response was generated; and

receive a request from the external system and modify the request to a format appropriate for the APS engine,

because it would provide data formatting independent of the source and allow responses and requests to be received and modified into appropriate formats for the respective senders and recipients.

Regarding Claim 13, MAPICS teaches:

the planning information comprises available-to-promise (ATP) supply information associated with one or more products (Reference E page 1 paragraph 1 line 2-4, ATP provided for individual or families of products); and

the APS engine comprises a demand fulfillment engine operable to promise ATP supply to a customer in response to the product orders (Reference E page 1 paragraph 1 line 4, production plans provided to customer order management for ATP calculations).

MAPICS does not teach:

the external system comprises an external ordering system associated with customers;

the requests comprise product orders from customers.

Wong teaches:

the external system comprises an external ordering system associated with customers (column 14 line 49-52, external customer uses external ordering system);

the requests comprise product orders from customers (column 14 line 49-52, product order submitted by customer).

Wong teaches allowing users external to the enterprise to enter requests (column 6 line 30-35, external users may use web to track orders, track payments and order products). Wong teaches that the use of the web drastically streamlines business processes that are transactional in nature (column 4 line 18-21) and automates the various aspects of running a business (column 3 line 66 – column 4 line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the collective teachings of MAPICS, Wong and DataMirror, as discussed above, with the external systems comprise external ordering systems associated with customers and the requests comprise product orders from customers, as taught by Wong, because it would streamline business processes that are transactional in nature and automate to the greatest degree possible, the various aspects of running a successful and profitable business.

Claims 14-19 recite limitations already addressed by the rejection of Claims 1-13 above, therefore the same rejection applies.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,151,582 by Huang discloses a decision support system for the management of an agile supply chain.

US 6,609,101 by Landvater discloses a supply chain management system for use in retail store chains.

US 5,231,567 by Matoba discloses manufacturing planning system.

US 6,119,102 by Rush discloses a MRP system with viewable master production schedule.

US 6,356,797 by Hsieh discloses a method for automatic scheduling of production plan.

US 5,809,477 by Pollack discloses a method for allocation and scheduling of beds in a pediatric intensive care unit.

US 5,993,041 by Toba discloses a production controller for facility group work start.

US 6,826,538 by Kalyan discloses a method for planning component purchases.

US 6,272,389 by Dietrich discloses a method for capacity allocation in an assembly environment.

Web.archive.org MAPICS.com webpage of February 29, 2000, "news Announcements: Energized for e-business eWorkplace and Your Future".

Web.archive.org MAPICS.com webpage of November 8, 1999, "The AS/400 – The Preferred MAPICS Platform".

Web.archive.org MAPICS.com webpage of January 23, 2000, "Building Productivity throughout the Enterprise".

Web.archive.org MAPICS.com webpage of November 5, 1999, "Products Financial".

Web.archive.org MAPICS.com webpage of November 4, 1999, "Products Engineering".

Web.archive.org MAPICS.com webpage of November 5, 1999, "Products Operations".

Web.archive.org MAPICS.com webpage of February 19, 1999, "Customers Success – York International Denmark".

Web.archive.org MAPICS.com webpage of October 5, 1999, "Customers Success – Weber Aircraft".

Web.archive.org MAPICS.com webpage of February 19, 1999, "Customers Success – Volvo Construction Equipment Sweden".

Web.archive.org MAPICS.com webpage of February 22, 1999, "Customers Success – Timesavers, Inc.".

Web.archive.org MAPICS.com webpage of March 5, 2000, "Customers Success – Tech International Ohio".

Web.archive.org MAPICS.com webpage of May 6, 1999, "Customers Success – Sanyo Energy Germany".

Web.archive.org MAPICS.com webpage of October 4, 1999, "Customers Success – Dialight Corporation".

Web.archive.org MAPICS.com webpage of August 31, 1999, "News EuroMAPICS".

SAP INFO, January 17, 2001, "Logistics Masterplan", pp. 1-2, discusses the Supply Chain Council's SCOR (Supply Chain Operations Reference) Model.

Canadian News, June 23, 1999, "DataMirror the first to deliver new cluster management solution for IBM AS/400", pp.1-3.

Web.archive.org XML.com webpage of April 24, 1999, "CSS, XSL and other style sheet and presentation issues".

IBM, inc.'s presentation of October 3, 2000, "IBM eServer iSeries 400...for Extreme Business" 38 slides.

Paula Richard's (IBM) presentation of April 13, 2000, "AS/400 and JAVA: Update", 70 slides, "<http://www.common.be/pdf/files/13042000AS400JavaUpdate.PDF>".

Johnston, Sam, September 1997, "Communicating with Sam – Disaster Recovery and High Availability". Toronto Users Group for Midrange Systems, Volume 13, Number 1, pp.1-3.

Harter, Charlie, September 1997, "Why you should web-enable your AS/400". Toronto Users Group for Midrange Systems, Volume 13, Number 1, pp.1-3.

Web.archive.org cmssoftware.com webpage of September 1, 1999, "Order Processing/Customer Service".


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 703-305-0550. The examiner can normally be reached on 8-6.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS 1-28-05


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